

# Newsletter



(Faculty and staff, from left: Robin Zhang, Haluk Cetin, Marcie Venter, Michelle Casey, Gary Stinchcomb, Bassil El Masri, Jane Benson, Michael Busby, Anthony Ortmann, David Jones, and Sung-ho Hong)

## Department of Earth and Environmental Sciences

### Introducing Earth and Environmental Sciences

#### Greetings!

For many of you, we have been known as the Department of Geosciences for a very long time. We are very excited to announce that we are now the Department of Earth and Environmental Sciences (EES)! We appreciate your unwavering support throughout the years and ask for your patience and continued support as we begin this new chapter together.

Our new identity represents the interdisciplinary nature of our curricula and faculty expertise. It would also give prospective students a clearer path to our programs and related careers. We are now offering BS and MS degree programs in EES, including Tracks in Archaeology, Earth Science Secondary Certification, Environmental Science, Geography and GIS, and Geology. We also offer an MS in EES, both non-thesis and thesis options, with thesis Concentrations in Archaeology, Environmental Geology, Geoinformatics, and Watershed Science (jointly offered with Murray State University Watershed Studies Institute). In addition, students in any discipline have the opportunity to earn a GIS Certificate as an undergraduate and a Certificate in Geospatial Data Science as a graduate student.

### Dr. George Kipphut establishes the Alice and George Kipphut Sr. Scholarship



Dr. George Kipphut, Professor Emeritus and former Chair of the Department of Geosciences, recently established the Alice & George Kipphut Sr. Scholarship in Earth and Environmental Sciences, in honor of his loving parents and to assist students at Murray State University in obtaining an education to prepare them for a career in the field of earth and environmental sciences. Dr. Kipphut had a successful career as a research scientist at the University of North Carolina, the University of Alaska, and the University of Wisconsin before coming to Murray. During his 25+ years at Murray State University, Dr. Kipphut is highly published, very successful in securing grants; and has received several honors including the Neil Weber Award for Excellence and the Max Carman Outstanding Teacher Award. We are truly grateful for Dr. Kipphut's generosity and his many contributions to Murray State.

## Faculty Spotlight Dr. Gary Stinchcomb



(Dr. Gary Stinchcomb with his Outstanding Kentucky Geologist Award)

Rock, paper, scissors. Gary chose rock. Gary Stinchcomb's fascination with all things rock and soil began when he was 5-6 years old when his mother had to drag him out of the sand box. He followed this up by digging large exploratory holes in the garden. Fast forward a decade or so and he completed his BA from Penn State (2001), MS from Temple University (2006) and then a PhD from Baylor University (2012). He returned to Penn State as a postdoctoral fellow, focusing on soil geochemistry. Gary is now an Assistant Professor in the Watershed Studies Institute and Department of Earth and Environmental Sciences at Murray State University.

His research interests include studying soil geomorphic response to environmental change. He currently advises three graduate students, Ben Ferguson, Lance Stewart and Kevin Bynum, and mentors several undergraduate students in his research lab. They study soils in Ethiopia, Kenya and USA. Some of their current work focuses on buried soils and paleoflood deposits along the Middle Tennessee, Clarks and Delaware River with the aim of reconstructing past environments and deciphering deep soil carbon dynamics. Their work has been funded through the National Science Foundation, Leakey Foundation, Electric Power Research Institute and NASA.

## 2017 - 2018 Outstanding Seniors and Outstanding Graduate Students



(From left, front row – Mallory Gerzan, Molly Karnes, Abigail Glass, Josh Gallina; back row – Zach Elliott, Garrett Puccetti, Kayla Zachary, Travis West, Ben Estes)

Outstanding Senior in Earth Science: Molly Karnes

Outstanding Senior in Environmental Geology: Mallory Gerzan and Kayla Zachary

Outstanding Senior in Geoarchaeology: Zachariah Elliott

Outstanding Senior in Geographic Information Science: Travis West

Outstanding Graduate Student in Teaching: Randal Philip Roberson

Outstanding Graduate Student in Research: Randal Philip Roberson

### 2017-18 Scholarship recipients

Barbara and Hays Brooks Scholarship: Molly Karnes

Clyde Reed-Jim Smith Scholarship: Zach Elliott

A B Waters Scholarship: Abigail Glass

John E. and Ann N. Wesler Scholarship: Zach Elliott

Jesse D. and Deborah C. Jones Scholarship: Molly Karnes, Travis West



## Experimental learning rules!!!



*(Students in geomorphology class really excited to learn about streams)*



We are fortunate to have the entire world as our laboratory, and experiential learning tradition in our disciplines is as old as the disciplines themselves. Nowadays, while we still use hammers, shovels, and paper maps, we have collected many new tools to bring with us to the field. Mobile mapping and drones are now used with computer mapping and standard satellite imagery. Ground penetrating radar and magnetic gradiometers provide great aid to the archaeologists. Since January 2017, our augmented reality sandbox (ARS) has been operational alongside the stream table in the Terrain Modeling Lab. Students get many opportunities to get hands-on in classes, research projects and internships.



*(Students in forensic archaeology class recover artifacts in the field, Spring 2018)*



*(Brandon Rose working for the US Geological Survey (USGS) as a summer intern, July 2018)*



*(Mrs. Benson leads a field mapping class, Fall 2017)*



## Update from retired faculty



*(Dr. Tom Kind with family in Florida)*

It sure doesn't seem like retirement happened nearly ten years ago in June, 2009. "They" say that "time flies when you're having fun" or "as one gets older." Both are true in my case. Being retired offers the freedom to do what one wants when one wants, within a few limits of course. My wife, Jan, and I have visited many interesting places nearby and around the country. We have also nearly worn out portions of I-40 on the way from Murray to Little Rock and Santa Fe where our children and their families reside. One of our favorite places to be with family is St. George Island, FL, where walking the beach, shelling, and fishing are pretty much the entertainment. I continue to be involved in Watershed Watch, a volunteer group that assists in monitoring the health of local water bodies, and the Planning Commission of the City of Murray. I also enjoy fishing, hunting, racquetball, tying flies, gardening, photography, and visiting with friends. 📍 By Dr. Tom Kind

## Update from alumni



### **Allison Keller, Environmental Inspector, Department of Environmental Protection, West Virginia**

In 2010 I graduated as the Outstanding Geosciences Senior in Environmental Geology. As a graduate student at Michigan Tech I co-taught a field course in Kenya and South Africa in 2011. I moved back to Kentucky to work at The Explorium of Lexington as the Science Education Coordinator. In summer 2012 I then moved to Charleston, WV to work for the Department of Environmental Protection as a coal mine Environmental Inspector. My main duties are ensuring mine operators follow federal and state laws regarding blasting, mining, revegetation, reclamation and water. I became a certified Blasting Inspector in fall 2017. Quarterly we inspect via helicopter to check for offsite damages in the steep mountainous terrain. I was married to Nick Keller in October 2014 and our son Denver Paul was born in January 2018. We live in Charleston, WV with our dog (Ace) and cat (Duke). 📍 By Allison Keller (Miller)

### **Eric Morris, GISP, Project Manager, Quantum Spatial, Lexington, Kentucky**

I entered Murray State with a hope to one day "work with maps". I graduated with a B.S. in 2007 but took a job before finishing my initial graduate coursework, as a wise Dr. Kind once predicted, but I made my way back to finish in 2012. My first major job involved nearly 3 years overseas acquiring and producing lidar data and imagery to support the warfighter. I used the intense working and learning conditions to springboard into a lidar-focused career. From there I moved to NOAA where I developed geospatial products for the Digital Coast and advised on contract requirements. Regularly, I provided outreach to coastal constituents which [luckily] led me to speak at 2016's TEDxCharleston to discuss #sealevelrise. I now enjoy my current role as a Project Manager for Quantum Spatial where I manage nationwide geospatial projects from inception to delivery spanning the gamut of what "geospatial" means. I am also a regional officer for ASPRS in the Mid-South region. I am now back in a state I didn't know I missed until I left. I live in Lexington with my MSU alumna wife and our 2-year-old son. 📍 By Eric Morris





# MURRAY STATE UNIVERSITY

Department of Earth and Environmental Sciences  
334 Blackburn Science Building  
Murray, Kentucky 42071 - 3346  
(270) 809 - 2591  
[murraystate.edu/ees](http://murraystate.edu/ees)

## Please Stay In Touch



*Calloway County Middle School students enjoy the augmented reality sandbox as they tour the Terrain Modeling Laboratory.*

If you would like to donate to the Department of Earth and Environmental Sciences, we have a number of scholarships to select from, including the Wesler Scholarship, the Matthai-Panzer Scholarship, the Reed-Smith Scholarship, and the recently formed Alice and George Kipphut Sr. Scholarship. Gifts to the Department of Earth and Environmental Sciences encourage student success in a variety of ways, by providing grants and scholarships, funding travel, or by purchasing equipment upgrades. Gifts of any size are greatly appreciated and always needed!

Checks should be sent to the Office of Development, Heritage Hall, Murray, KY 42071-3441. Please specify a fund in the memo field. Donations can be made over the phone by calling 1-877-282-0033 or 270-809-3001. Visit [murraystate.edu/giving](http://murraystate.edu/giving) to make an online donation. Thank you for your support!

Are you traveling through western Kentucky or plan on being in the area? The Department of Earth and Environmental Sciences is always on the lookout for alumni willing to speak about their employment experiences or research. Each semester we host a number of seminars, workshops, and speakers covering a wide-range of topics. Guest speakers from around the United States have presented on paleobiology, the heritage of the Land Between the Lakes, ocean sedimentation, and deep Earth structures.

Our students greatly value the experience and guidance from our alumni!

If you are in the area and would like to present on a subject or employment opportunities, please contact us. Email our administrative assistant, Mrs. Jennifer Thorn, [jthorn@murraystate.edu](mailto:jthorn@murraystate.edu), or call 270-809-2591 to schedule.



[facebook.com/murraystateees](https://facebook.com/murraystateees)



[twitter.com/murraystateesc](https://twitter.com/murraystateesc)



[instagram.com/murraystateees](https://instagram.com/murraystateees)